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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/241,948 02/02/99 FENCL

F 71800/90598

EXAMINER

IM22/0419

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ART UNIT

PAPER NUMBER

1744

DATE MAILED:

04/19/01

*5*

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

## Office Action Summary

Application No.

09/241,948

Applicant(s)

FENCL ET AL.

Examiner

Leigh McKane

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20,21,31 and 32 is/are allowed.
- 6) ☒ Claim(s) 1,2,7-10,14-16,18,19,22 and 27-30 is/are rejected.
- 7) ☒ Claim(s) 3-6,11-13,17 and 23-27 is/are objected to.
- 8) ☐ Claims \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

### Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.

- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 14, 15, 18, 19, and 28-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 14, "the plural seals" and in claims 15, 18, and 19, "the seals" all lack positive antecedent basis because a recitation of "the base seals against" or "the cover seals tightly" in claim 1 does not provide positive antecedent basis for a seal in claims 14, 15, 18, and 19.

In claims 28-30, the terminology "the seals" in line 2 lacks positive antecedent basis because a recitation of "the base sealing against" or "the cover sealing tightly" in claim 22 does not provide positive antecedent basis for a "seal" in claims 28-30.

***Claim Rejections - 35 USC § 103***

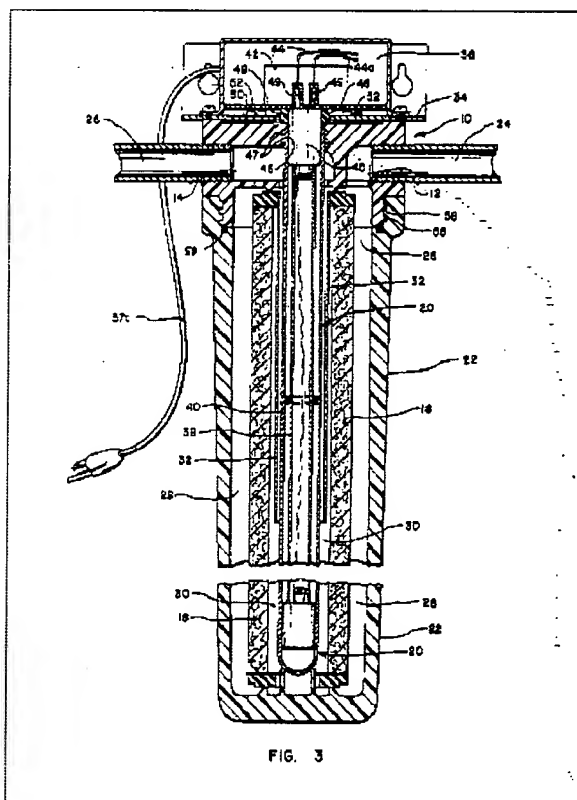
3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 1, 2, 7-10, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (U.S. Patent No. 4,971,687) in view of Wiesmann (U.S. Patent No. 5,151,174).

Anderson teaches a germicidal lamp for water treatment including an elongate germicidal tube **38** including an envelope **40** and a stem **45**. A fixture includes a cover **36** and a base **34**, the base having an upper and a lower surface. The lower surface of the base “seals” against a wall **10** and the cover is detachable from the base by removing screws. Together, the cover **36** and



the base **34** define a “sealed” interior space. The base **34** includes an opening (not labeled) through which the stem **45** of the tube **38** is passed. A tube holder **48** includes an engaging surface to secure the stem of the tube. Insertion of the tube in the base seals the opening in the base. Within the interior space of the fixture is a power supply, which is intended to “receive electric power of usual household voltage, e.g., 110 to 120 volts, through a power connection **55c** and to transform it into a proper higher voltage source of power, which will vary according to lamp design.”

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See col.3, lines 17-21. Moreover, it is disclosed by Anderson that the “parts may be made of any material suitable for exposure to water without undergoing corrosion. See col.4, lines 13-15.

Anderson does not disclose that the tube is a type which emits UVC radiation. However, Anderson does teach that the “irradiation means 20 comprises an ultraviolet lamp 38, e.g., an ozone or non-ozone lamp, and a quartz sleeve 40 which is transparent to U-V rays.” See col.3, lines 22-24. Thus, the lamp may be non-ozone producing. Wiesmann teaches the use of replaceable UVC-producing lamps **14** in a water treatment apparatus. Since Wiesmann evidences that UVC radiation is successful in the field of water treatment, it would have been obvious to one of ordinary skill in the art to use such for the lamps of Anderson.

With respect to the weight of the lamp, this limitation is not patentably significant since it at most relates to the size of the article under consideration, which is not ordinarily a matter of invention. In re Yount, 36 C.C.P.A. (Patents) 775, 171 F.2d 317, 80 USPQ 141.

As to the cover and base having a clamshell design, the replacement of the screw-type attachment means for a hinge is no more than a matter of design choice and is readily known to one of ordinary skill in the art.

With respect to the tube holder **48** being part of the base **34**, it has been held that use of a one-piece construction instead of a two-pieced construction, as disclosed by Anderson, would be merely a matter of obvious engineering choice. In re Fridolph, 50 CCPA 745, 89 F.2d 509, 135 USPQ 319. In re Larson, 144 USPQ 347 (CCPA 1965).

6. Claims 22 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson.

Anderson teaches a germicidal lamp for water treatment including an elongate germicidal tube **38** including an envelope **40** and a stem **45**. A fixture includes a cover **36** and a base **34**, the base having an upper and a lower surface. The lower surface of the base “seals” against a wall **10** and the cover is detachable from the base by removing screws. Together, the cover **36** and the base **34** define a “sealed” interior space. The base **34** includes an opening (not labeled) through which the stem **45** of the tube **38** is passed. A tube-holder **48** includes an engaging surface to secure the stem of the tube. Insertion of the tube in the base seals the opening in the base. Within the interior space of the fixture is a power supply, which is intended to “receive electric power of usual household voltage, e.g., 110 to 120 volts, through a power connection 55c and to transform it into a proper higher voltage source of power, which will vary according to lamp design.” See col.3, lines 17-21. Moreover, it is disclosed by Anderson that the “parts may be made of any material suitable for exposure to water without undergoing corrosion. See col.4, lines 13-15.

With respect to the weight of the lamp, this limitation is not patentably significant since it at most relates to the size of the article under consideration, which is not ordinarily a matter of invention. In re Yount, 36 C.C.P.A. (Patents) 775, 171 F.2d 317, 80 USPQ 141.

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*Allowable Subject Matter*

7. Claims 15, 18, 19, and 28-30 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

8. Claims 3-6, 11-13, 17, and 23-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claims 20, 21, 31, and 32 are allowed.

10. The following is a statement of reasons for the indication of allowable subject matter: Anderson with Wiesmann fails to teach the airflow rate and temperature; the UVC radiation fluence; a spring clamp tube holder; a tube holder attached to the cover of the fixture; an electrical connector included in the tube holder; a seal that can withstand air pressure of at least 15, 20, or 30 inches of water gage; or electrical leads including piggyback connectors. Nor does the combination of Anderson with Wiesmann give the skilled artisan motivation to add such especially since both Anderson and Wiesmann are operating in a water environment.

11. The following is an examiner's statement of reasons for allowance: Since both Anderson and Wiesmann are used in a water environment, there is no motivation to use these lamp systems in an air handling or HVAC system.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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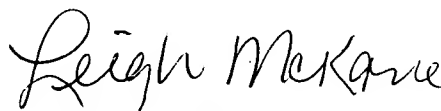
*Conclusion*

12. The art made of record and not relied upon is considered pertinent to applicant's disclosure. Although not prior art, all of Brickley, Bach, and Fencil et al teach similar devices.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leigh McKane whose telephone number is 703-305-3387. The examiner can normally be reached on Monday-Wednesday (7:15 am-4:45 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Warden can be reached on 703-308-2920. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7719 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

  
**Leigh McKane**  
**Primary Examiner**  
**Art Unit 1744**

elm  
April 18, 2001